

ABSTRACT

A CPU (1) automatically preserves the CPU context in a computer memory (5) that remains powered-up when the CPU is powered down in sleep mode. By means of the preserved CPU context, the CPU is able to instantly and

- 5 transparently resume program execution at the instruction of the program that was asserted for execution when the CPU was powered down. The CPU is permitted to power down frequently, even during execution of a program, and results in reduced average overall power consumption.

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